

525,439

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
4 March 2004 (04.03.2004)

PCT

(10) International Publication Number
WO 2004/018422 A1

(51) International Patent Classification⁷: **C07D 209/52, A61K 31/40, A61P 25/00**

(21) International Application Number:
PCT/IB2002/003433

(22) International Filing Date: 23 August 2002 (23.08.2002)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): **RANBAXY LABORATORIES LIMITED** [IN/IN]; 19, Nehru Place, 110 019 New Dehli (IN).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MEHTA, Anita** [IN/IN]; L-19/3, DLF Qutab Enclave, Phase-II, Gurgaon, 122001 Haryana (IN). **GUPTA, Jang Bahadur** [IN/IN]; 349, Sector-14, Gurgaon, 122001 Haryana (IN).

(74) Common Representative: **RANBAXY LABORATORIES LIMITED**; c/o Deshmukh, Jayadeep R., 600 College Road East, Princeton, NJ 08540 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FLUORO AND SULPHONYLAMINO CONTAINING 3,6-DISUBSTITUTED AZABICYCLO (3.1.0) HEXANE DERIVATIVES AS MUSCARINIC RECEPTOR ANTAGONISTS

(57) Abstract: This invention generally relates to the derivatives of novel 3,6 disubstituted azabicyclo[3.1.0] hexane's. The compounds of this invention are MUSCARINIC receptor antagonists which are useful, inter-ail for the treatment of various diseases of the respiratory, urinary and gastrointestinal systems mediated through MUSCARINIC receptors. The invention also relates to processes for the preparation of the compounds of the invention, pharmaceutical compositions containing the compounds of the present invention and the methods of treating the diseases mediated through MUSCARINIC receptors.



WO 2004/018422 A1